

CLAIMS:

No claim amendments are herewith proposed, and the following list of claims is provided simply for the convenience of the Examiner.

IN THE CLAIMS

1. (Previously Presented) A method of doing business over a network, comprising:
receiving a request for transmitting digital information, the request comprising an identification of a user and transmission constraints including a start time after which transmission may begin and an end time by which transmission should be completed, the digital information corresponding to a number of packets;
determining an estimated time required to transmit the digital information based at least on the number of packets and a network speed;
scheduling a transmit time for the digital information;
determining a cost for transmitting the digital information based at least on the transmission constraints, the estimated time required to transmit, and the transmit time;
accepting the digital information for transmission only if the estimated time required to transmit is less than or equal to a difference between the transmit time and the end time and if the determined cost is less than or equal to a maximum cost associated with the user; and
in response to the digital information being accepted for transmission, transmitting the digital information using the network after the start time and prior to the end time, and billing the determined cost to an account associated with the user.
2. (Previously Presented) A method, as in claim 1, where the digital information is transmitted at the cost.
3. (Previously Presented) A method, as in claim 1, where the digital information is rejected for transmission if the estimated time required to transmit is more than the difference between the transmit time and the end time or if the determined cost is greater than the maximum cost.

4. (Previously Presented) A method, as in claim 3, further comprising determining a second network having a suitable second cost determined to allow transmission of the digital information over the second network, accepting the digital information for transmission over the second network at the second cost, and wherein billing the determined cost further comprises billing the second determined cost to the account.

5. (Previously Presented) A method, as in claim 3, where the digital information is rescheduled for a second time and accepted for transmission at a second cost after the digital information is rejected.

6. (Previously Presented) A method, as in claim 1, further comprising receiving an acknowledgment of the transmission.

7. (Previously Presented) A method, as in claim 6, wherein billing the determined cost further comprises producing a bill on receipt of the acknowledgment.

8. (Original) A method, as in claim 1, where one or more portions of the digital information are accepted for transmission and are transmitted.

9. (Previously Presented) A method, as in claim 8, further comprising receiving an acknowledgment of the transmission of one or more of the portions.

10. (Previously Presented) A method, as in claim 9, wherein billing the determined cost further comprises producing a bill on receipt of the acknowledgment for one or more of the portions.

11. (Previously Presented) A method, as in claim 3, where one or more portions of the digital information are initially rejected and then accepted for transmission at one or more second times and at one or more second costs.

12. (Original) A method, as in claim 1, where the request has one or more priorities.

13. (Original) A method, as in claim 12, where the priority is that the digital information is transmitted within a time period.

14. (Previously Presented) A method, as in claim 13, where the time period is any one or more of the following: over night, two days, and one week.

15. (Original) A method, as in claim 12, where the priority is a freight priority that requires the digital information to be transmitted within a freight time period with no acknowledgments.

16. (Previously Presented) A method, as in claim 1, where the digital information is scheduled for one or more retransmissions if the estimated time required to transmit is more than the difference between the estimated transmit time and the end time.

17. (Previously Presented) A method, as in claim 1, where the digital information is scheduled for one or more retransmissions if no acknowledgment of the transmission of the digital information is received.

18. (Original) A method, as in claim 1, where the digital information is also not transmitted if one or more criteria are not met.

19. (Previously Presented) A method, as in claim 18, where the criteria include any one or more of the following: a file size, a release time, a deadline, one or more recipients, one or more user locations, an acknowledgment, a negative acknowledgment, a partial acknowledgment, a bandwidth, a quality of service, a retransmission count, and a retransmission schedule.

20. (Withdrawn) A method of doing business over a network, comprising:

receiving from a client a request for transmitting digital information from a source address to at least one recipient, the request comprising the source address, an earliest start time, a maximum cost, a priority, and an identification of the at least one recipient, the digital information having a size;

responsive to the request, determining an end time at which the digital information should be completely transmitted to the at least one recipient;

based at least on the size and a network capacity, determining a total time required to transmit the digital information;

based at least on the size, the determined end time, the determined total time, the priority, and the cost, determining whether the digital information can be completely transmitted to the at least one recipient after the earliest start time and prior to the determined end time;

in response to a determination that the digital information cannot be completely transmitted to the at least one recipient after the earliest start time and prior to the determined end time, notifying the client; and

in response to a determination that the digital information can be transmitted to the at least one recipient:

begin transmitting the digital information at a time that is prior to the end time and later than the earliest start time; and

billing the client an amount that does not exceed the maximum cost.

21. (Withdrawn) The method of claim 20, wherein determining the end time further comprises determining the end time by using the priority and the start time.

22. (Withdrawn) The method of claim 21, wherein the request further comprises a transmission deadline, and wherein determining the end time further comprises determining the end time by using the transmission deadline.

23. (Canceled)

24. (Previously Presented) A method, as in claim 1, wherein the request further includes information from the client regarding how the client can be billed.

25. (Previously Presented) A method, as in claim 24, wherein the information from the client comprises an account identifier and billing the determined cost further comprises billing the determined cost to the account identified by the account identifier.

26. (Canceled)

27. (Previously Presented) A method, as in claim 1, further comprising:
in response to transmitting the digital information, determining whether transmission was successful; and

in response to a determination that the transmission was unsuccessful, determining whether the cost for transmission has exhausted an amount of the maximum cost, and in response to the cost for transmission not exhausting the amount of maximum cost, retransmitting the digital information.

28. (Previously Presented) A method, as in claim 1, wherein:
the request further comprises at least one item from the following: an expected data file size, a retransmission count, a transmission release date, a transmission deadline, and selected acknowledgments; and

determining the cost further comprises determining the cost using at least the at least one item.